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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,410	11/18/2003	Robert B. Chaffee	C0852-703030	7257

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EXAMINER	
SAFAVI, MICHAEL	

ART UNIT	PAPER NUMBER
3637	

NOTIFICATION DATE	DELIVERY MODE
10/10/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/717,410	Applicant(s) CHAFFEE, ROBERT B.	
	Examiner M. Safavi	Art Unit 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
- 4a) Of the above claim(s) 17-65 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 66-69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/19/07</u> . | 6) <input type="checkbox"/> Other: _____ |

Applicant's request for reconsideration of the finality of the rejection within the last Office action is persuasive and, therefore, the finality of that action is withdrawn. Applicant's response of January 19, 2007 is being treated as a response under 37 CFR § 1.111. However, since the following grounds of rejection have been applied within the previous Office action addressing the instant claims as had been addressed within the Office action of September 19, 2006 this action is being made final.

Information Disclosure Statement

Applicant's remarks on page 4 of the response as well as reference to various PCT applications on page 5 of the response has been noted. However, Application PCT/US03/14116 does not appear as corresponding to the parent-application 10/430,040. Application PCT/US02/21756 does not appear as corresponding to the parent-application 10/192,757. And, it is not evident that Application PCT/US03/37230 is a counterpart to the instant Application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent

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granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 7, 10, 11, 13-15, 66, 67, and 69 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,175,297 to Robbins et al. As for **claims 1, 7, 13, 66, and 67**, Robbins et al. '297 discloses, Figs. 1 and 6, an inflatable device, comprising an inflatable bladder 10 and a fluid controller 30/40/60 comprising a valve, (within 40), coupled to the inflatable bladder 10. The valve is configured and arranged to control the flow of fluid into and out of the bladder. The valve comprises a diaphragm 42, 53 with a "self-closing" cover 43/44, 54, 55, (hingedly coupled to the "device", **claim 66**). An electro/mechanical device 48 is configured and arranged to open the valve when the electro/mechanical device is actuated. As for **claim 10**, pump is at 40. As for **claims 14 and 15**, supplemental material of the mattress 10 can be any portion thereof with a portion 26, 28 of the fluid controller at least partially supported by the supplemental material. As for **claim 11**, pump 40 is housed in an acoustically insulative material by virtue of the pump being surrounded by the housing 48.

Claims 1-6, 10, 11, 13-15, and 67-69 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 6,073,289 to Bolden et al. As for **claims 1, 13, and 67**, Bolden et al. '289 discloses, Figs. 1, 5, and 8, an inflatable device, such as a mattress, comprising an inflatable bladder 22 and a fluid controller comprising a valve 142 coupled to the inflatable bladder 22. The valve is configured and arranged to control the flow of fluid into and out of the bladder. The valve comprises a diaphragm 174 with a

"self-closing" cover 164. A mechanical device 170 is configured and arranged to open the valve when the device is actuated. As for **claim 10**, pump is at 82. As for **claims 14 and 15**, supplemental material of the mattress 22/24 can be any portion thereof with a portion of the fluid controller 142 at least partially supported by the supplemental material as can be seen in Fig. 2, (see for example 78/80/86 which constitute supplemental material of the mattress 22/24). As for **claims 2, 5, and 68**, the inflatable device further comprises a compartment 142 surrounding the valve components including the "mechanical device", coupled to the profile of the bladder, as can be seen in Fig. 1 and 2. Thus the mechanical device is coupled to the bladder and supported by the bladder, (**claim 6**). The compartment is configured and arranged to enclose the valve, the compartment being adapted to receive pressurized fluid from a pump. As for **claim 11**, pump 82 is housed in an acoustically insulative material by virtue of the pump being surrounded by the pump housing. As for **claim 3**, the valve is a self-sealing valve and the cover 164 is adapted to prevent the valve from opening in the presence of air-pressure in the compartment. As for **claim 4**, the diaphragm and the mechanical device are configured so that when the mechanical device 170 is actuated it biases open the cover 164 and the diaphragm 174. Further, the diaphragm and the mechanical device are configured so that when the mechanical device 170 is actuated it biases open the cover 164' and the diaphragm 174.

Claims 1-3, 6, 10, 11, 16, and 67-69 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Publication 2002/0194678 to Chung. As for

claims 1 and 67, Chung '678 discloses, Fig. 9, an inflatable device comprising an inflatable bladder 92 and a fluid controller 95-99 comprising a valve 96/97 coupled to the inflatable bladder 92. The valve is configured and arranged to control the flow of fluid into and out of the bladder. The valve comprises a diaphragm 96 with a "self-closing" cover 97. A mechanical device 99 is configured and arranged to open the valve, (cover 97), when the device is actuated. As for **claim 10**, pump is at 94 and can be seen supported by the inflatable bladder, (via 95 for example), **claim 16**. As for **claims 2, and 68**, the inflatable device further comprises a compartment, (portion of 91 as well as portion of 92), surrounding the valve components including the "mechanical device", coupled to the bladder, as can be seen in Fig. 9A. Thus the mechanical device is coupled to the bladder and supported by the bladder, (**claim 6**). The compartment is configured and arranged to enclose the valve, the compartment being adapted to receive pressurized fluid from a pump, (portion of 92 forming the "compartment as well as at least a portion of 99 forming the "compartment, for example). As for **claim 11**, pump 94 is housed in an acoustically insulative material by virtue of the pump being surrounded by the housing 91/92. As for **claim 3**, the valve is a self-sealing valve and the cover 97 is adapted to prevent the valve from opening in the presence of air-pressure in the compartment, (see, for example, Figs. 9C and 9D).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bolden et al. '289 in view of U.S. Patent Publication 2002/0194678 to Chung.

Bolden '289 does not appear to specifically disclose that the compartment enclosing the valve or the compartment enclosing the pump is within the profile of the inflatable bladder. However, Chung '678 discloses an inflatable mattress arrangement with both the pump and fluid control or valve assemblies are placed with the profile of the bladder. Therefore, to have formed the Bolden et al. '289 mattress assembly with either or each of the pump and fluid control or valve assemblies are placed with the profile of the bladder 22/24, thus providing a more compact arrangement of components, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Chung '678.

Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bolden et al. '289 in view of U.S. Patent 6,098,000 to Long et al.

Long et al. teaches interchangeability between a fluid controller arrangement in which a solenoid activated valve is utilized to open and close an air cell to a pressure source for inflating the air cell or to a relief path for deflating the air cell and an arrangement in which a pilot valve acts to expose the main valve to its operable pressure in order to open and close an air cell to a pressure source for inflating the air

cell or to a relief path for deflating the air cell, col. 5, line 35 to col. 6, line 13. Therefore, to have provided the Bolden et al. fluid controller 142 with an electromechanical device for manipulating the valve and cap in order to inflate or deflate the bladder 22, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Long et al. '000.

Response to Arguments

Applicant's arguments filed January 19, 2007, with respect to the applied prior art, have been fully considered but they are not persuasive. Applicant's argument that a pump is not a valve is not persuasive. A valve can be any device for controlling fluid flow through a passage. What is shown and disclosed by Robbins et al. serves to read upon the language recited within claim 1. A pump is a fluid controller. A valve is a fluid controller. A cover is a fluid controller. Actually, anything involved with the control of fluid is a "fluid controller". The fluid controller can be a valve or any element which serves or helps serve to control fluid flow. The electro/mechanical device 48 of Robbins et al. serves to bias the cover 43/44, 54, 55 open when actuated, (i.e., the cover is open by and when the electro/mechanical device 48 is actuated).

As for Applicant's arguments against Bolden et al., element 164 of Bolden constitutes a cover and serves to read upon "a cover" as broadly presented within the language of claim 1 with element 174 serving to read upon "a diaphragm" as presented within the language of claim 1. The Bolden element 164 is "adapted to prevent the flow of fluid through the valve and into the bladder, when closed".

As for Applicant's arguments against Chung, whether or not elements 96 and 97 of Chung's Fig. 9 are identical the Fig. 9 element 96 of Chung serves to read upon "a diaphragm" with the element 96 of Chung serving to read upon "a cover" as broadly presented within the language of claim 1.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

This application contains claims 17-65 drawn to an invention nonelected with traverse in the reply filed on August 29, 2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Safavi whose telephone number is (571) 272-7046. The examiner can normally be reached on Mon.-Thur., 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



**MICHAEL SAFAVI
PRIMARY EXAMINER
ART UNIT 354**

M. Safavi
September 20, 2007